

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (amended) The compound of claim 21 ~~4~~, and physiologically acceptable salts thereof, wherein R4 ~~is~~ comprises a phenyl ring linked to a terminal aromatic unsaturated ring having 5 ring members and 4 nitrogen atoms as ring members.
6. (cancelled)
7. (cancelled)
8. (cancelled)
9. (cancelled)
10. (cancelled)
11. (amended) The compound of claim 21, ~~4~~ wherein:
A is a direct bond;
B is N;
R1 ~~is~~ comprises a phenyl ring substituted with 0 to 3 halogen atoms;

R2 ~~is~~ comprises piperidine; and

R4 ~~is~~ -Phenyl-Z comprises $[-T-(CH_2)_n-Z]$,

~~n~~ comprises an integer from 0 to about 7,

~~T~~ comprises a carbocyclic ring having 3 to about 8 ring members, an unsaturated ring having 3 to about 8 carbon atoms as ring members, a heterocyclic ring having 3 to about 8 ring members, a heteroaromatic ring having 5 to about 8 ring members, a bicyclic ring, a heterobicyclic ring, a tricyclic ring, a heterotricyclic ring, a polycyclic ring or a heteropolycyclic ring,

~~Z~~ is comprises a carbocyclic ring having about 4 to about 7 ring members, a heterocyclic ring having about 4 to about 7 ring members, an aromatic ring having about 5 to about 7 ring members, a heteroaromatic ring having about 5 to about 7 ring members, a bicyclic ring, a an aromatic heterobicyclic ring, a polycyclic ring, a an aromatic heteropolycyclic ring; or any above group substituted on at least one available ring atom by an alkyl group; ~~or any above group substituted on at least one available ring nitrogen atom by a benzyl group, a substituted benzyl group, an alkoxybenzyl group, a substituted alkoxybenzyl group, a benzhydryl group or a substituted benzhydryl group;~~ and wherein the connecting point between the Phenyl $[-(CH_2)_n-]$ group and the Z group can be any available ring carbon atom or any available ring nitrogen atom.

12. (cancelled)

13. (amended) A pharmaceutical composition for an individual or animal comprising a therapeutically effective amount of at least one compound of claim 21 4 in isolated and purified form or a physiologically acceptable salt thereof and further comprises at least one member selected from an excipient, a vehicle, an adjuvant, a flavoring, a colorant, or a preservative.

14. (cancelled)

15. (cancelled)

16. (cancelled)

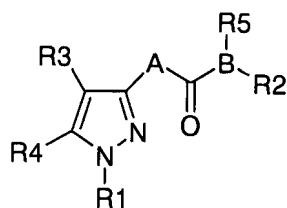
17. (cancelled)

18. (cancelled)

19. (cancelled)

20. (cancelled)

21. (new) A compound of formula I below, and physiologically acceptable salts thereof, comprising:



wherein:

I

A is a direct bond;

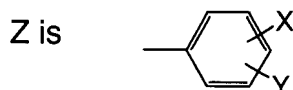
B is N;

R1 is -Z;

Z is an aromatic ring having about 5 to about 7 ring members or an aromatic ring having about 5 to about 7 ring members substituted on at least one

available ring atom by an alkyl group; and wherein the connecting point between the $-(CH_2)_n-$ group and the Z group can be any available ring carbon atom; or

Z is a 6 member aromatic ring or a substituted 6 member aromatic ring; and wherein the connecting point between the $-(CH_2)_n-$ group and the Z group can be any available ring carbon atom; or



wherein X and Y are each independently selected from H, halogen, N_3 , NCS, CN, NO_2 , NX_1X_2 , OX_3 , OAc, O-acyl, O-aryl, NH-acyl, NH-aryl, CHO, CF_3 , $COOX_3$, SO_3H , $SO_2NX_1X_2$, $CONX_1X_2$, alkoxy, alkylmercapto, alkylamino, di-alkylamino, alkylsulfinyl, alkylsulfonyl or (when Z is a structure having two adjacent carbon atoms methylene dioxy,

X_1 and X_2 are each independently selected from H or alkyl,
or

X_1 and X_2 together are part of a heterocyclic ring having about 4 to about 7 ring members and optionally one additional heteroatom selected from O, N or S, or

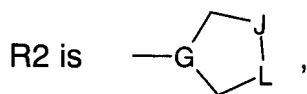
X_1 and X_2 together are part of an imide ring having about 5 to about 6 members,

X_3 is selected from H, alkyl, hydroxyloweralkyl or alkyl- NX_1X_2 ,

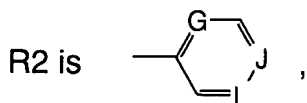
X_4 is selected from H or alkyl;

R2 is selected from a carbocyclic ring having about 4 to about 7 members, a heterocyclic ring having about 4 to about 7 members, an aromatic ring having about 5 to about 7 ring members, a heteroaromatic ring having about 5 to about 7 members, a bicyclic ring, a heterobicyclic ring, a tricyclic ring, a heterotricyclic ring, a polycyclic ring

or a heteropolycyclic ring; or

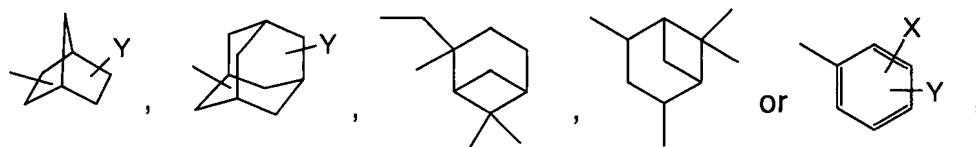


wherein G is selected from CH or N, and L and J are each independently selected from (CH₂)_n, O, NH or S, n is an integer from 0 to about 7; or



wherein G, L and J are each independently selected from CH or N; or

R2 is selected from



wherein X and Y are each independently selected from H, halogen, N₃, NCS, Ph (phenyl), CN, NO₂, NX₁X₂, OX₃, OAc, O-acyl, O-aroyl, NH-acyl, NH-aroyl, CHO, CF₃, COOX₃, SO₃H, SO₂NX₁X₂, CONX₁X₂, alkyl, alcohol, alkoxy, alkylmercapto, alkylamino, di-alkylamino, alkylsulfinyl or alkylsulfonyl,

X₁ and X₂ are each independently selected from H or alkyl, or

X₁ and X₂ together are part of a heterocyclic ring having about 4 to about 7 ring members and optionally a second heteroatom selected from O, N or S, or

X₁ and X₂ together are part of an imide ring having about 5 to about 6 members,

X₃ is selected from H, alkyl, hydroxyloweralkyl or alkyl-NX₁X₂; or

R2 is selected from a carbocyclic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms, a carbocyclic ring having 6 ring atoms fused to a

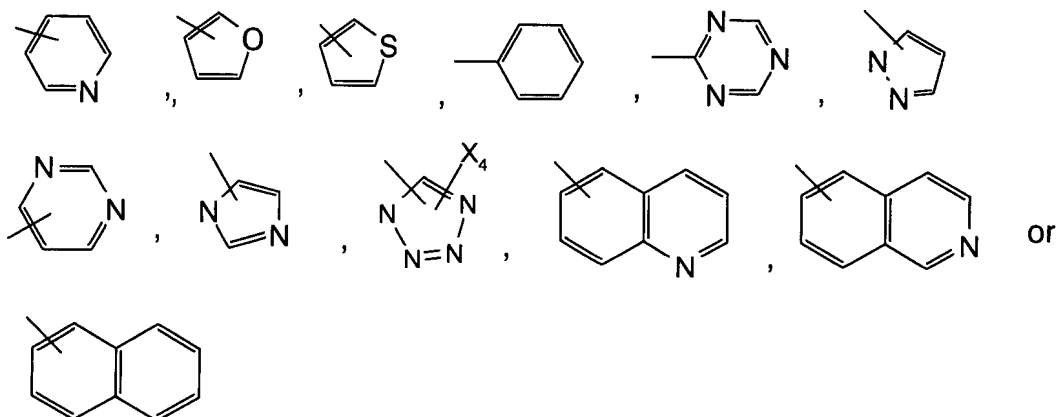
heteroaromatic ring having from 5 to 7 ring atoms, a heterocyclic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms, an heterocyclic ring having 6 ring atoms fused to a heteroaromatic ring having from 5 to 7 ring atoms, an aromatic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms, an aromatic ring having 6 ring atoms fused to a heteroaromatic ring having from 5 to 7 ring atoms, a heteroaromatic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms or a heteroaromatic ring having 6 ring atoms fused to a heteroaromatic ring having from 5 to 7 ring atoms;

R3 is CN, CH₃ or CH₂OH;

R4 is -Phenyl-Z,

Z is selected from an aromatic ring having about 5 to about 7 ring members, a heteroaromatic ring having about 5 to about 7 ring members, an aromatic bicyclic ring, an aromatic heterobicyclic ring, an aromatic polycyclic ring, an aromatic heteropolycyclic ring; or any above group substituted on at least one available ring atom by an alkyl group; and wherein the connecting point between the -(CH₂)_n- group and the Z group can be any available ring carbon atom or any available ring nitrogen atom; or

Z is selected from



wherein X_4 is selected from H or alkyl; and

R5 is H or alkyl;

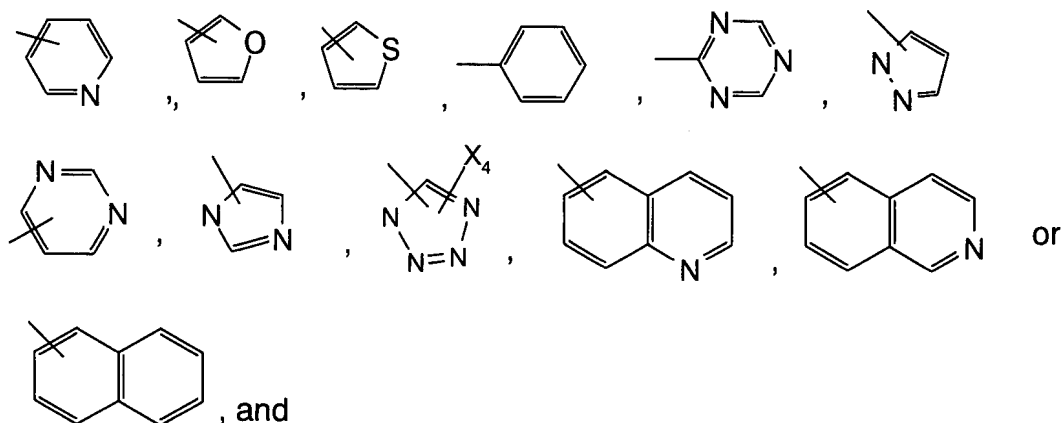
with the provisos that:

when A is a direct bond and B is N then R1 cannot be H;

when A is a direct bond and B is N and R5 is hydrogen and R2 has a nitrogen directly connected to the nitrogen of the amide at the 3-position of pyrazole ring, then R4 can not be a phenyl ring or a phenyl ring having one to three substitutions selected from halogen, trifluoromethyl, 1-pyrrolidinyl, 1-piperidinyl, 4-morpholinyl, 1-piperazinyl, lower-alkyl substituted 1-pyrrolidinyl, lower-alkyl substituted 1-piperidinyl, lower-alkyl substituted 4-morpholinyl, and lower-alkyl substituted 1-piperazinyl.

22. (new) The compound of claim 21 wherein R4 is -Phenyl-Z and Z is selected from a heteroaromatic ring having about 5 to about 7 ring members, an aromatic heterobicyclic ring, an aromatic heteropolycyclic ring; or any above group substituted on at least one available ring atom by an alkyl group; and wherein the connecting point between the Phenyl group and the Z group can be any available ring carbon atom or any available ring nitrogen atom.

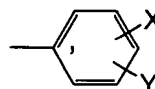
23. (new) The compound of claim 21 wherein R₄ is -Phenyl-Z,
 Z is selected from



X₄ is H or alkyl.

24. (new) The compound of claim 21 wherein R₁ is -Z, and
 Z is a 6 member aromatic ring or a substituted 6 member aromatic ring; and wherein the
 connecting point between the -(CH₂)_n- group and the Z group can be any available ring
 carbon atom.

25. (new) The compound of claim 21 wherein R₁ is



wherein X and Y are each independently selected from H, halogen, N₃, NCS, CN, NO₂, NX₁X₂, OX₃, OAc, O-acyl, O-aroyl, NH-acyl, NH-aroyl, CHO, CF₃, COOX₃, SO₃H, SO₂NX₁X₂, CONX₁X₂, alkoxy, alkylmercapto, alkylamino, di-alkylamino, alkylsulfinyl, alkylsulfonyl or (when Z is a structure having two adjacent carbon atoms methylene dioxy,

X₁ and X₂ are each independently selected from H or alkyl, or

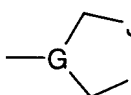
X₁ and X₂ together are part of a heterocyclic ring having about 4 to about 7 ring members and optionally one additional heteroatom selected from O, N or S, or

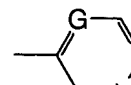
X₁ and X₂ together are part of an imide ring having about 5 to about 6 members,

X₃ is selected from H, alkyl, hydroxyloweralkyl or alkyl-NX₁X₂, and

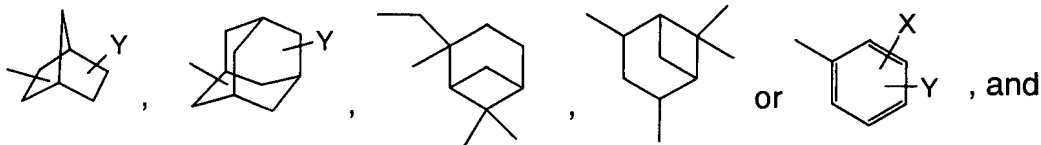
X₄ is selected from H or alkyl.

26. (new) The compound of claim 21 wherein R₂ is selected from a carbocyclic ring having about 4 to about 7 members, a heterocyclic ring having about 4 to about 7 members, an aromatic ring having about 5 to about 7 ring members, a heteroaromatic ring having about 5 to about 7 members, a bicyclic ring, a heterobicyclic ring, a tricyclic ring, a heterotricyclic ring, a polycyclic ring or a heteropolycyclic ring.

27. (new) The compound of claim 21 wherein R₂ is , and G is selected from CH or N, and L and J are each independently selected from (CH₂)_n, O, NH or S, n is an integer from 0 to about 7.

28. (new) The compound of claim 21 wherein R₂ is , and G, L and J are each independently selected from CH or N.

29. (new) The compound of claim 21 wherein R₂ is selected from



X and Y are each independently selected from H, halogen, N₃, NCS, Ph (phenyl), CN, NO₂, NX₁X₂, OX₃, OAc, O-acyl, O-aroyl, NH-acyl, NH-aroyl, CHO, CF₃, COOX₃, SO₃H, SO₂NX₁X₂, CONX₁X₂, alkyl, alcohol, alkoxy, alkylmercapto, alkylamino, di-alkylamino, alkylsulfinyl or alkylsulfonyl,

X₁ and X₂ are each independently selected from H or alkyl, or

X₁ and X₂ together are part of a heterocyclic ring having about 4 to about 7 ring members and optionally a second heteroatom selected from

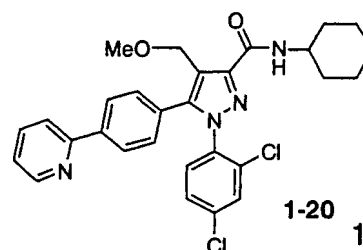
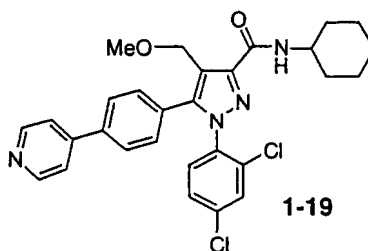
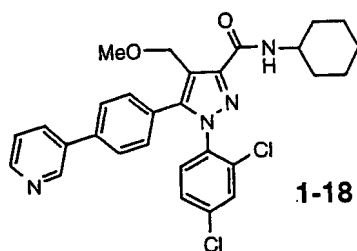
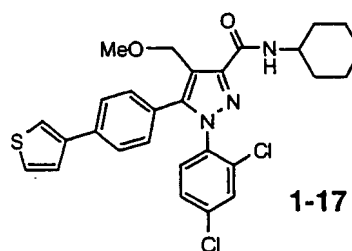
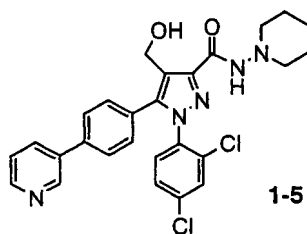
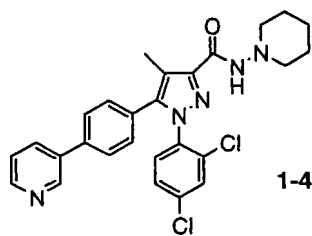
O, N or S, or

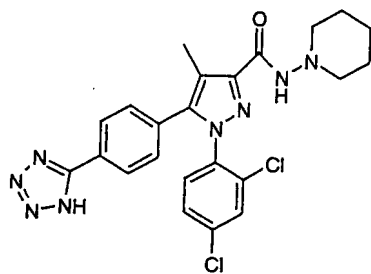
X₁ and X₂ together are part of an imide ring having about 5 to about 6 members,

X₃ is selected from H, alkyl, hydroxyloweralkyl or alkyl-NX₁X₂.

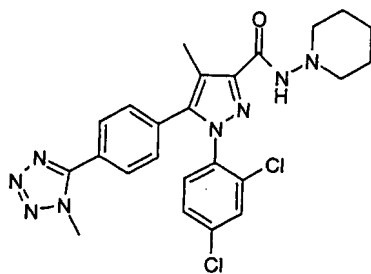
30. (new) The compound of claim 21 wherein R₂ is selected from a carbocyclic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms, a carbocyclic ring having 6 ring atoms fused to a heteroaromatic ring having from 5 to 7 ring atoms, a heterocyclic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms, an heterocyclic ring having 6 ring atoms fused to a heteroaromatic ring having from 5 to 7 ring atoms, an aromatic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms, an aromatic ring having 6 ring atoms fused to a heteroaromatic ring having from 5 to 7 ring atoms, a heteroaromatic ring having 6 ring atoms fused to a heterocyclic ring having from 5 to 7 ring atoms or a heteroaromatic ring having 6 ring atoms fused to a heteroaromatic ring having from 5 to 7 ring atoms.

31. (new) The compound of claim 21, and physiologically acceptable salts thereof, selected from one of the following structures:

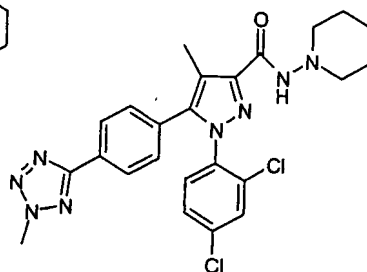




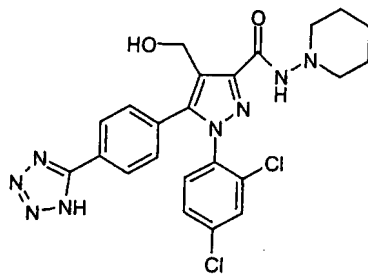
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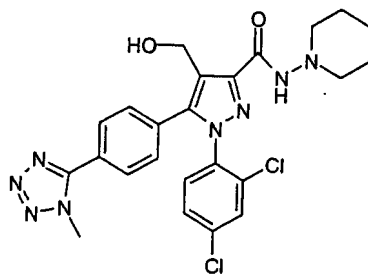
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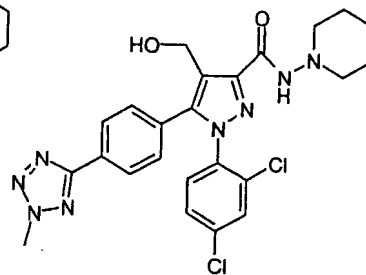
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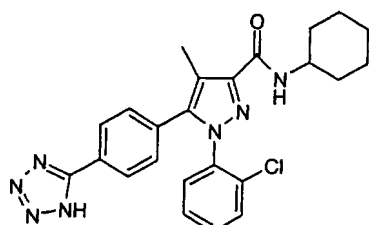
2-4



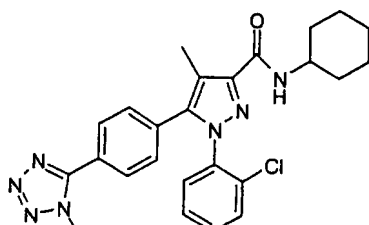
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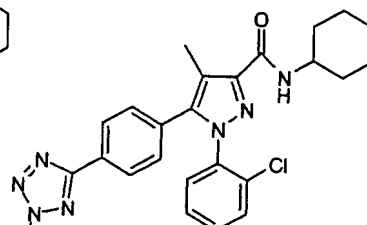
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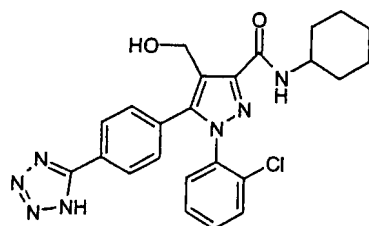
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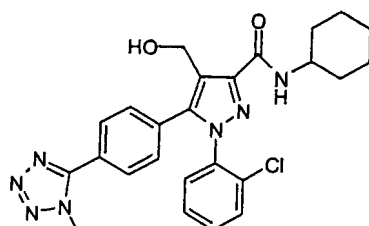
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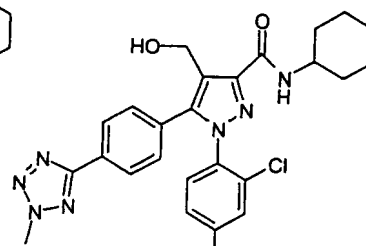
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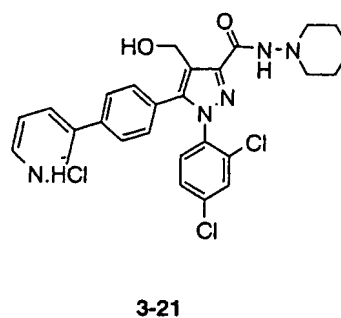
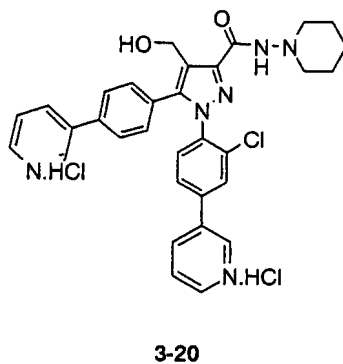
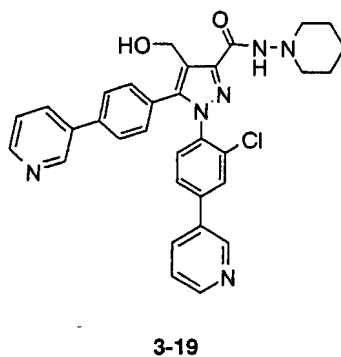
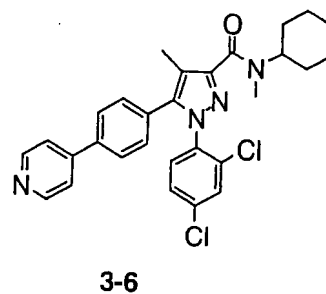
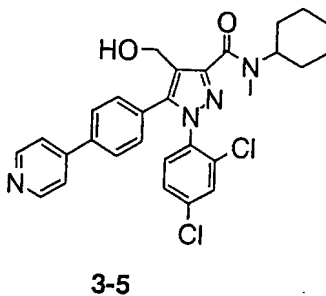
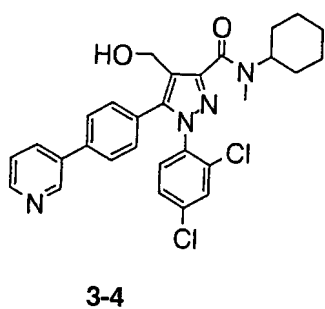
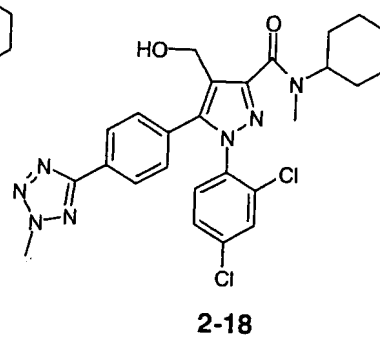
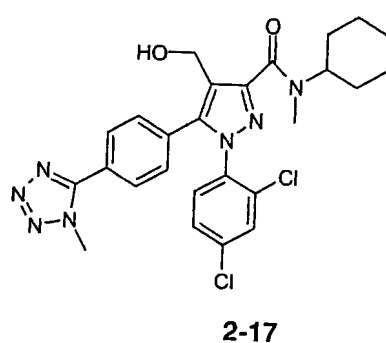
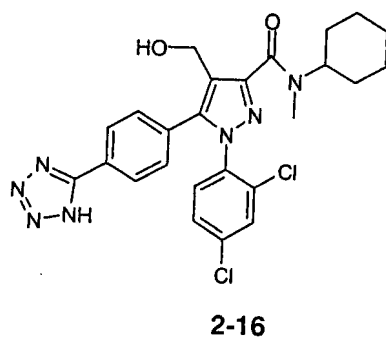
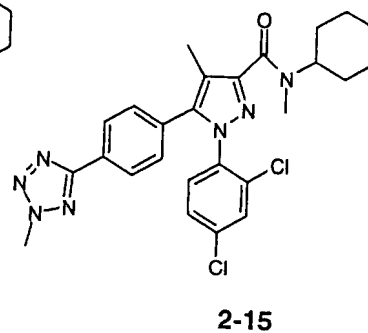
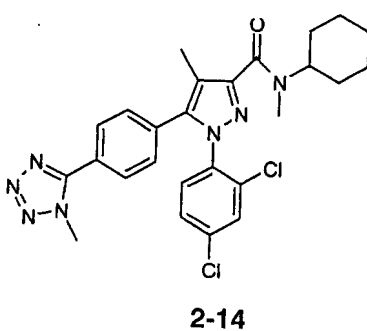
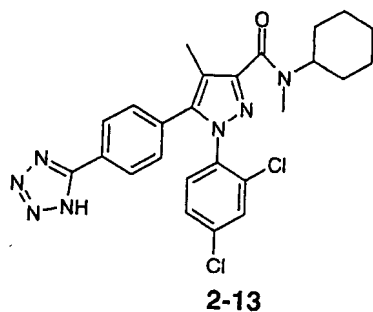
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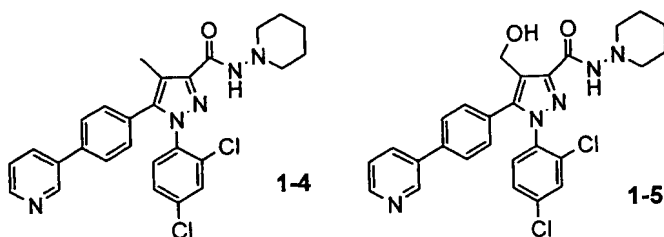
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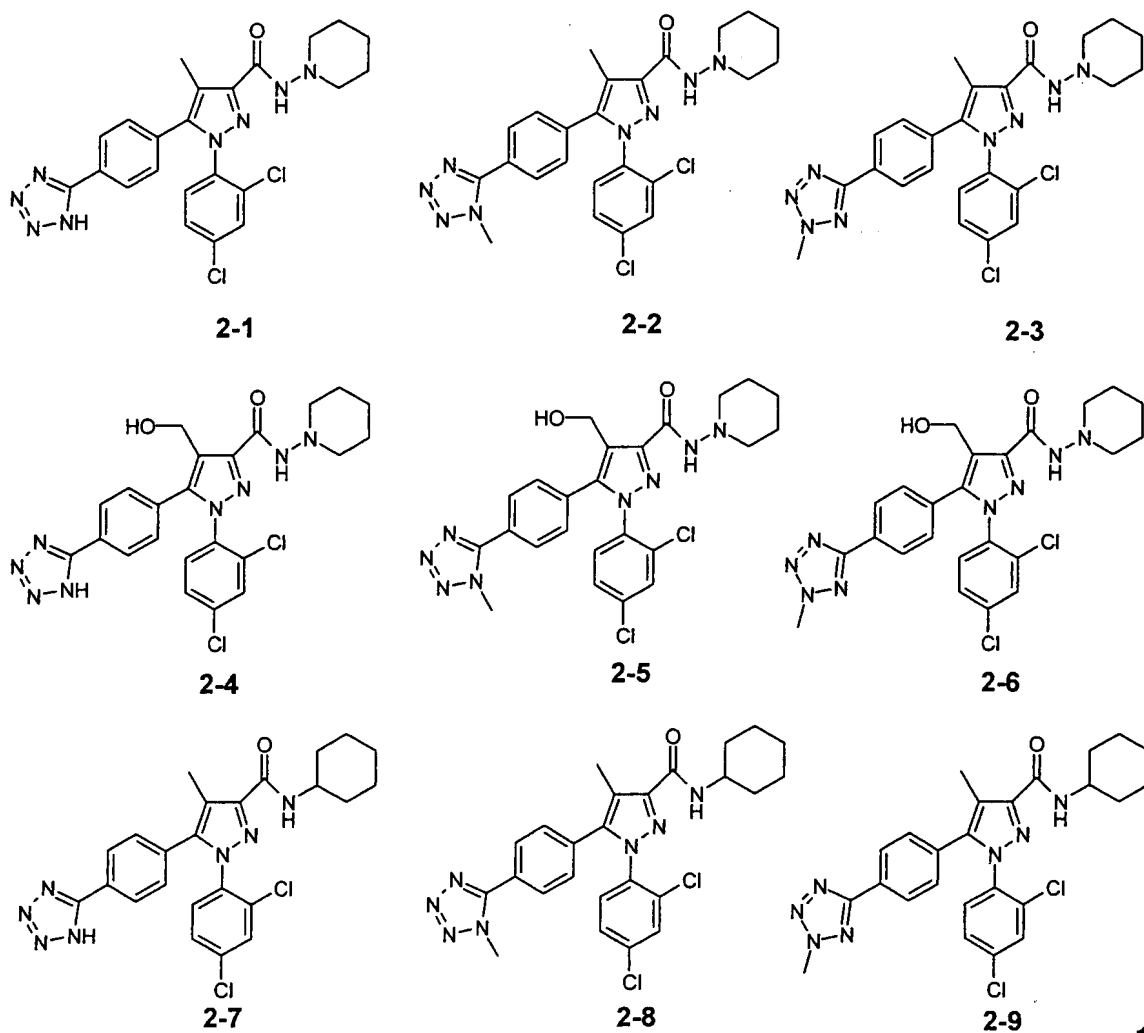
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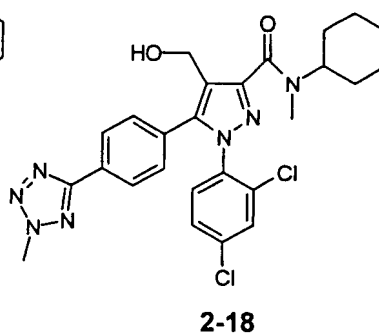
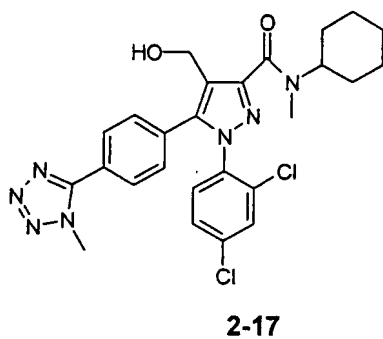
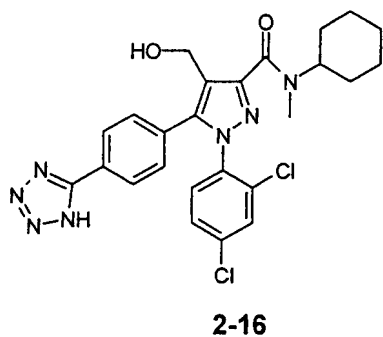
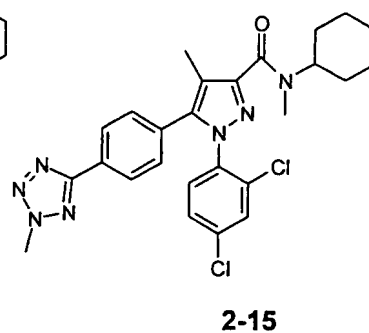
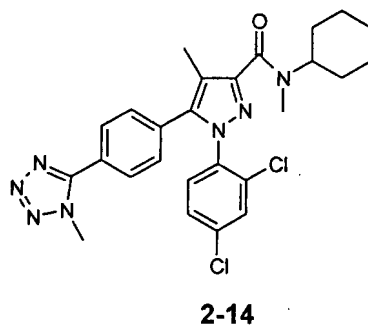
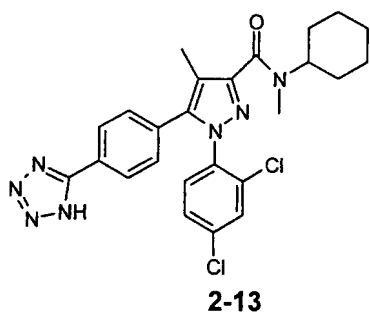
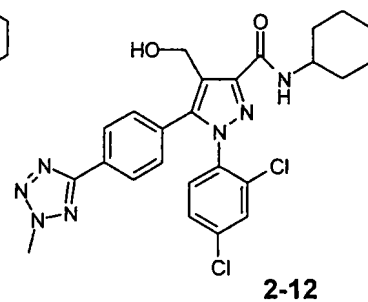
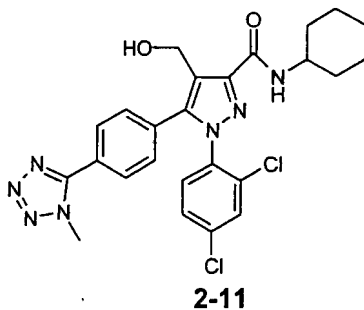
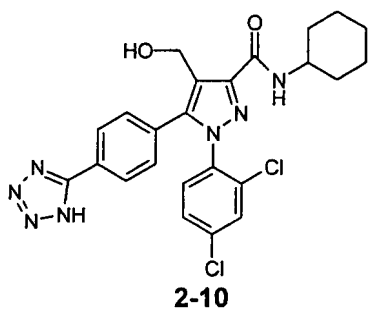


32. (new) The compound of claim 21, and physiologically acceptable salts thereof, selected from one of the following structures:

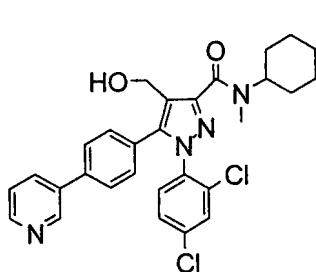


33. (new) The compound of claim 21, and physiologically acceptable salts thereof, selected from one of the following structures:

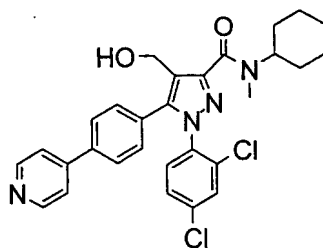




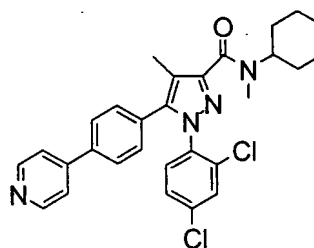
34. (new) The compound of claim 21, and physiologically acceptable salts thereof, selected from one of the following structures:



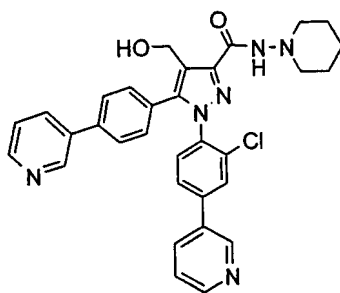
3-4



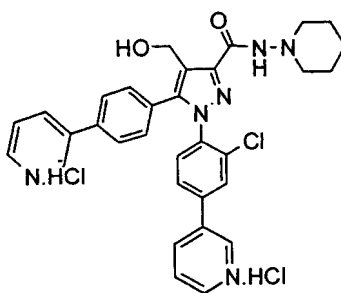
3-5



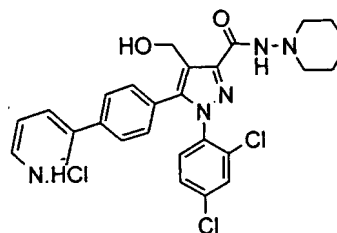
3-6



3-19

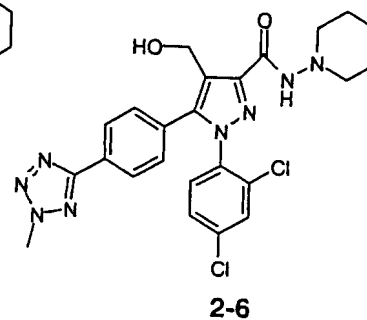
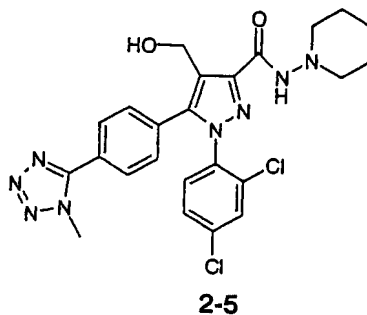
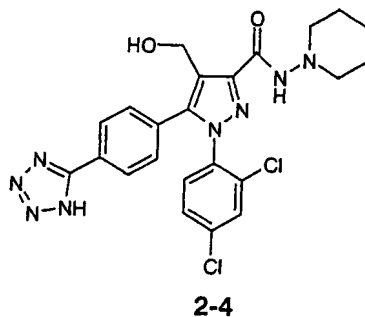
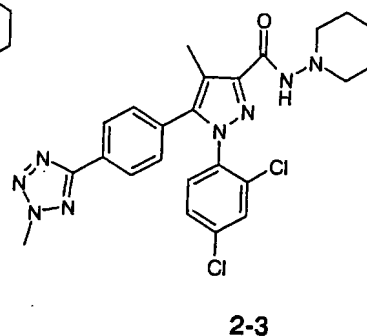
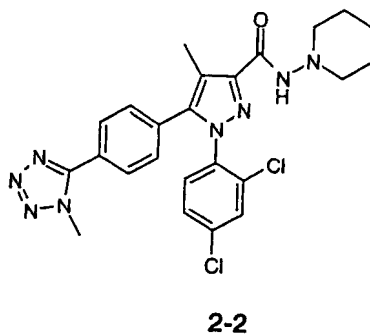
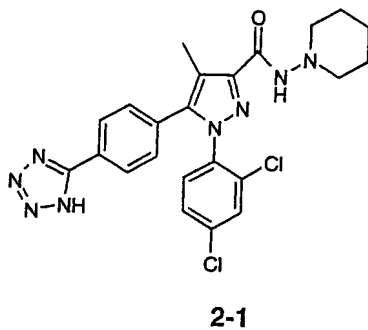
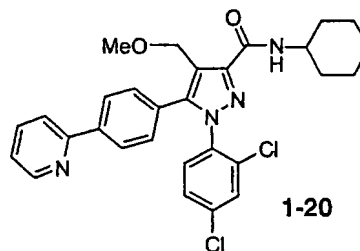
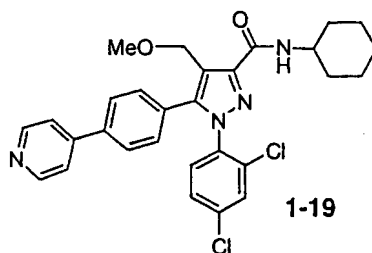
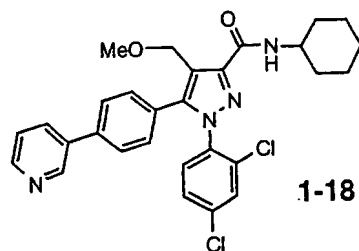
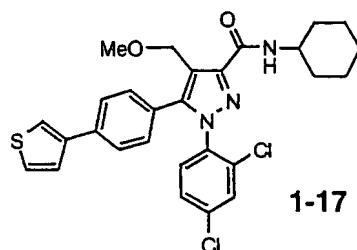
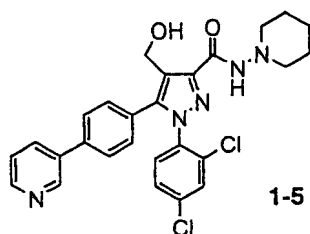
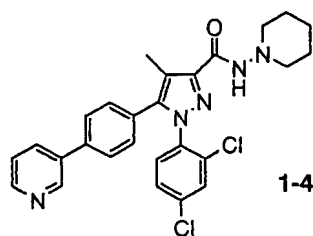


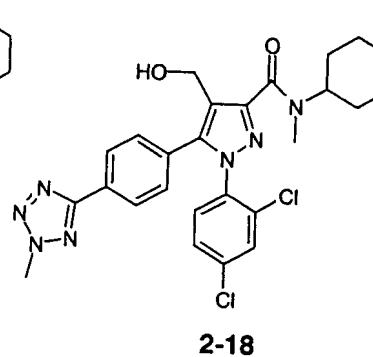
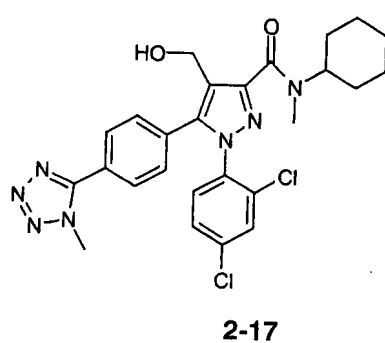
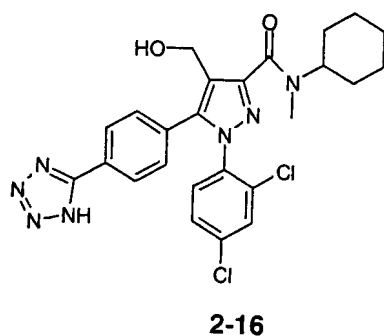
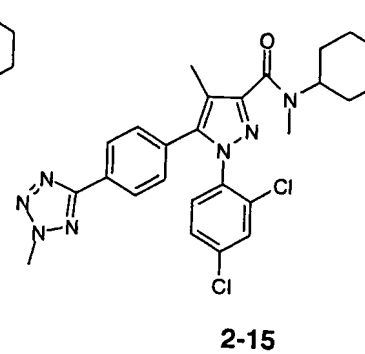
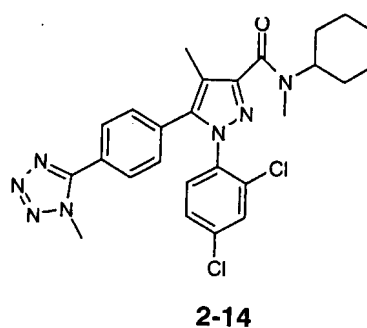
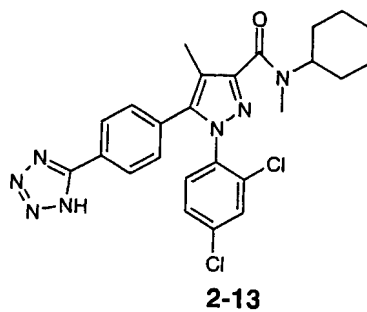
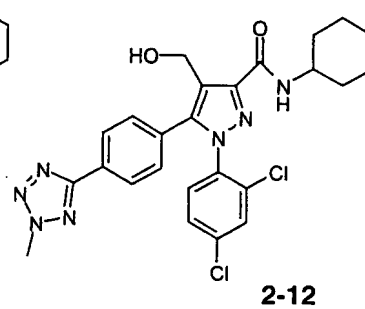
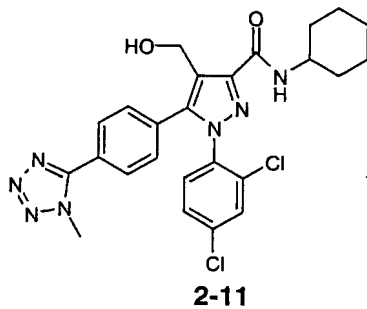
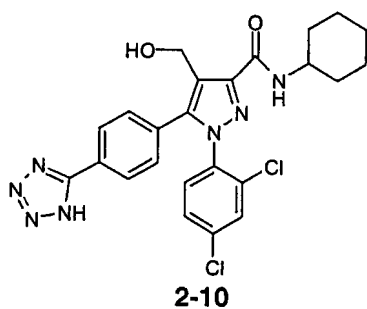
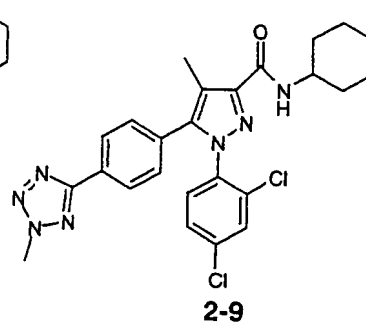
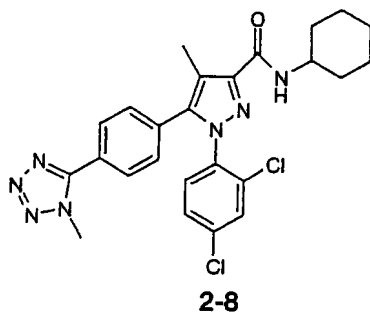
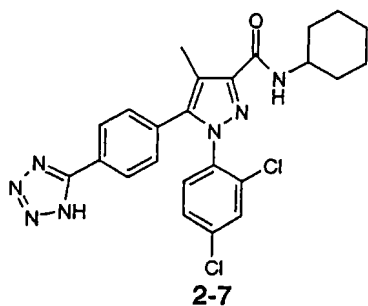
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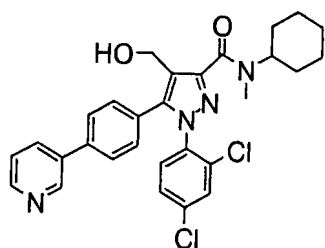


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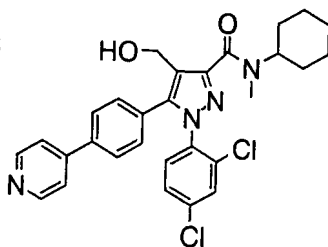
35. (new) The pharmaceutical composition of claim 13 wherein the compound is selected from one of the following structures:



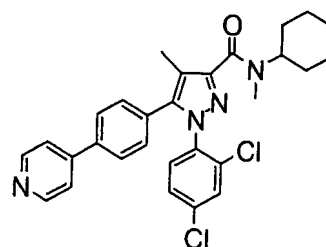




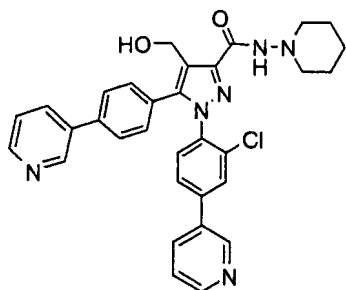
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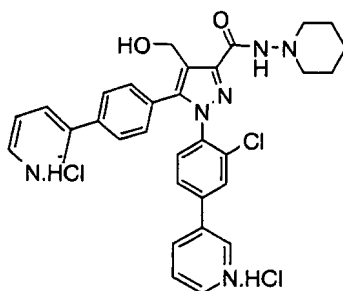
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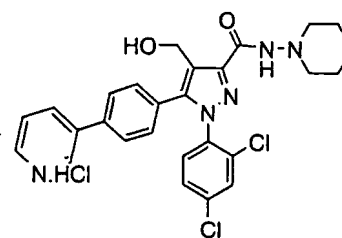
3-6



3-19



3-20



3-21